reference herein. Effects of differing complexity can be provided as stock effects; for example, a primitive effect such as a simple vector force to be output in a specified direction at a specified magnitude can be provided, or a more complex effect that includes multiple primitive effects can be provided. One particularly significant, more complex effect is the enclosure. An enclosure is a set of forces that occur only when the cursor is in or near a geometrically bounded ("enclosed") area of the screen. Enclosures can be associated with forces at their borders to attract the cursor to the inside of the bounded area, keep the cursor outside the bounded area, or attract the cursor to the border surrounding the bounded area. The enclosure may take a variety of shapes, for example rectangular or elliptical, and may also be associated with one or more other force effects when the cursor or pointer is positioned inside the enclosure. Examples of force effects that can be provided and programmed are specified in the FEELit Application Programming Interface (API) from Immersion Corporation of San Jose, CA., detailed in patent application no. 08/970,953, now Patent No. 6,300,936, filed 11/14/97, and incorporated by reference herein.

Replace the paragraph starting on Page 45, line 34, with:

FIGURES 19a, 19b, and 19c illustrate examples of force sensation design interfaces that can be displayed to edit the force effects for an object in the HTML editor. Alternatively, a separate force design application, such as I-Force Studio, can be run if the user wishes to modify or create a force effect. The shown interface windows are similar to the force sensation design tools provided in I-FORCE Studio® available from Immersion Corporation. These design tools provide a fully animated graphical environment for rapidly adjusting physical parameters of feel sensations, and then optionally saving them as "feel resources." Authors may craft tactile feel sensations by stretching springs, manipulating surfaces, placing liquids, and adjusting other graphical representations and physical metaphors that represent each associated force feedback phenomenon. The design tools also empower end users with the ability to edit the "feel resource" using the same intuitive animated graphical controls used by the web page author. A user with no programming experience or familiarity with force feedback can quickly design high-fidelity, compelling sensations using these design tools. Such graphical manipulation for design of force effects is described in greater detail in U.S. Patents 6,147,674 and 6,169,540, both incorporated herein by reference.

In the Claims:

Claims which have been changed by this amendment are presented below and are labeled as "amended." A marked up version of the amended claims follows the Remarks section.

Please cancel claims 1-56 without prejudice.

Please add the following claims:

57. (new) A method for defining force sensations for a haptic feedback interface device, the method comprising:

causing an image to be displayed on a display device, said display device coupled to a computer; and

receiving input from a user, said input providing a displayed graphical designation on said image, said displayed graphical designation spatially designating an area of said image, said area to be associated with at least one force effect selected by said user, said at least one selected force effect to be output as a force sensation by said haptic feedback interface device, said haptic feedback interface device including a user manipulatable object graspable and moveable by a user of said haptic feedback interface device.

58. (new) A method as recited in claim 57 wherein said at least one associated force effect is to be output when a user of said force feedback interface device moves a user-controlled cursor over a location on said image correlated with said area designated by said graphical designation.

59. (new) A method as recited in claim 57 wherein said image is an image of a web page object to be displayed on a web page downloaded over a network to a client machine, and wherein said haptic feedback interface device is in communication with said client machine.

60. (new) A method as recited in claim 59 wherein said at least one selected force effect is to be commanded by said client machine receiving said web page and to be output as said force sensation by said haptic feedback interface device.

61. (new) A method as recited in claim 59 wherein said area of said image is said entire web page object.

62. (new) A method as recited in claim 59 wherein said displayed graphical designation includes a graphical outline encompassing said area of said image.

63. (new) A method as recited in claim 62 wherein said area is a portion of said image, said portion not including an entire area of said image.

64. (new) A method as recited in claim 62 wherein said selected force effect associated with said graphical outline includes a texture effect, said texture effect to be output when a user-controlled cursor moves within an interior region of said outline.

65. (new) A method as recited in claim 62 wherein said displayed graphical designation includes a graphical line displayed on said area of said image, wherein said selected force effect associated with said graphical line includes a barrier force resisting motion of said interface device that causes said user-controlled cursor through said graphical line.

66. (new) A method as recited in claim 57 wherein said input from said user is input using a user interface tool that creates said graphical designation.

67. (new) A method as recited in claim 57 wherein said image is a two-dimensional pictorial image or text.

68. (new) A method as recited in claim 60 wherein said graphical designation is visually perceptible by said user providing said input and is visually invisible to a user of said haptic feedback interface device.

69. (new) A method as recited in claim 57 wherein said at least one selected force effect is output as a force sensation to said user of said client machine when said user moves a cursor over said graphical designation.

70. (new) An apparatus for defining force sensations for a haptic feedback interface device, the apparatus comprising:

means for causing an image to be displayed on a display device, said display device coupled to a computer;

means for receiving input from a user, said input providing a displayed graphical designation on said image, said displayed graphical designation spatially designating an area of said image; and

means for associating said area with at least one force effect selected by said user, said at least one selected force effect to be output as a force sensation by said haptic feedback interface device, said haptic feedback interface device including a user manipulatable object graspable and moveable by a user of said haptic feedback interface device.

71. (new) An apparatus as recited in claim 70 wherein said at least one associated force effect is to be output when a user of said force feedback interface device moves a user-controlled cursor over a location on said image correlated with said area designated by said graphical designation.

72. (new) An apparatus as recited in claim 70 wherein said apparatus is a client machine, and wherein said image is an image of a web page object to be displayed on a web page downloaded over a network from a server machine to said client machine, and wherein said haptic feedback interface device is in communication with said client machine.

73. (new) An apparatus as recited in claim 72 wherein said displayed graphical designation includes a graphical outline encompassing said area of said image.

74. (new) An apparatus as recited in claim 73 wherein said area is a portion of said image, said portion not including an entire area of said image.

75. (new) An apparatus as recited in claim 73 wherein said selected force effect associated with said graphical outline includes a texture effect, said texture effect to be output when a user-controlled cursor moves within an interior region of said outline.

76. (new) An apparatus as recited in claim 73 wherein said displayed graphical designation includes a graphical line displayed on said area of said image, wherein said selected force effect associated with said graphical line includes a barrier force resisting motion of said interface device that causes said user-controlled cursor through said graphical line.

77. (new) A computer readable medium including program instructions to be implemented on a computer, said program instructions performing steps comprising:

causing an image to be displayed on a display device, said display device coupled to a computer; and

receiving input from a user, said input providing a displayed graphical designation on said image, said displayed graphical designation spatially designating an area of said image, said area to be associated with at least one force effect selected by said user, said at least one selected force effect to be output as a force sensation by said haptic feedback interface device, said haptic feedback interface device including a user manipulatable object graspable and moveable by a user of said haptic feedback interface device.

78. (new) A computer readable medium as recited in claim 77 wherein said image is a web page object to be displayed in a web page, wherein said input from said user is received using a graphical tool implemented in a force-enabled web page authoring interface running on said computer.